

## PATENT COOPERATION TREATY

PCT

NOTIFICATION OF THE RECORDING  
OF A CHANGE(PCT Rule 92bis.1 and  
Administrative Instructions, Section 422)Date of mailing (day/month/year)  
31 October 2000 (31.10.00)

From the INTERNATIONAL BUREAU

To:

BLASKO, John, P.  
Technology, Patents and Licensing,  
Inc.  
300 North Broad Street  
Doylestown, PA 18901  
ETATS-UNIS D'AMERIQUEApplicant's or agent's file reference  
8887.3006PCT

## IMPORTANT NOTIFICATION

International application No.  
PCT/US99/28628International filing date (day/month/year)  
02 December 1999 (02.12.99)

## 1. The following indications appeared on record concerning:

 the applicant  the inventor  the agent  the common representative

## Name and Address

BLASKO, John, P.  
J.P. Blasko Professional Corp.  
107 North Broad Street  
Doylestown, PA 18901  
United States of America

State of Nationality

State of Residence

Telephone No.

(215) 348-7775

Facsimile No.

(215) 348-1488

Teleprinter No.

## 2. The International Bureau hereby notifies the applicant that the following change has been recorded concerning:

 the person  the name  the address  the nationality  the residence

## Name and Address

BLASKO, John, P.  
Technology, Patents and Licensing,  
Inc.  
300 North Broad Street  
Doylestown, PA 18901  
United States of America

State of Nationality

State of Residence

Telephone No.

(215) 348-7775

Facsimile No.

(215) 348-1488

Teleprinter No.

## 3. Further observations, if necessary:

## 4. A copy of this notification has been sent to:

<input checked="" type="checkbox"/> the receiving Office	<input type="checkbox"/> the designated Offices concerned
<input type="checkbox"/> the International Searching Authority	<input checked="" type="checkbox"/> the elected Offices concerned
<input checked="" type="checkbox"/> the International Preliminary Examining Authority	<input type="checkbox"/> other:

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland	Authorized officer
Facsimile No.: (41-22) 740.14.35	J. Leitao

Authorized officer
J. Leitao
Telephone No.: (41-22) 338.83.38

## PATENT COOPERATION TREATY

PCT

NOTIFICATION OF ELECTION  
(PCT Rule 61.2)

From the INTERNATIONAL BUREAU

To:

Assistant Commissioner for Patents  
 United States Patent and Trademark  
 Office  
 Box PCT  
 Washington, D.C.20231  
 ETATS-UNIS D'AMERIQUE

in its capacity as elected Office

Date of mailing (day/month/year) 18 August 2000 (18.08.00)	Applicant's or agent's file reference 8887.3006PCT
International application No. PCT/US99/28628	Priority date (day/month/year) 03 December 1998 (03.12.98)
International filing date (day/month/year) 02 December 1999 (02.12.99)	
<b>Applicant</b> <b>ELDERING, Charles, A.</b>	

1. The designated Office is hereby notified of its election made:

in the demand filed with the International Preliminary Examining Authority on:

30 June 2000 (30.06.00)

in a notice effecting later election filed with the International Bureau on:

\_\_\_\_\_

2. The election  was

was not

made before the expiration of 18 months from the priority date or, where Rule 32 applies, within the time limit under Rule 32.2(b).

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Facsimile No.: (41-22) 740.14.35	Authorized officer Manu Berrod Telephone No.: (41-22) 338.83.38
---	---

## PATENT COOPERATION TREATY

9/807887

From the INTERNATIONAL BUREAU

PCT

NOTIFICATION OF THE RECORDING  
OF A CHANGE(PCT Rule 92bis.1 and  
Administrative Instructions, Section 422)Date of mailing (day/month/year)  
06 décembre 2001 (06.12.01)To:  
BLASKO, John, P.  
Technology, Patents and Licensing,  
Inc.  
300 North Broad Street  
Doylestown, PA 18901  
ETATS-UNIS D'AMERIQUEApplicant's or agent's file reference  
8887.3006PCT

## IMPORTANT NOTIFICATION

International application No.  
PCT/US99/28628International filing date (day/month/year)  
02 décembre 1999 (02.12.99)

## 1. The following indications appeared on record concerning:

 the applicant     the inventor     the agent     the common representative

Name and Address ELDERING, Charles, A. 315 Hedgerow Lane Doylestown, PA 18901 United States of America	State of Nationality US	State of Residence US
	Telephone No.	
	Facsimile No.	
	Teleprinter No.	

## 2. The International Bureau hereby notifies the applicant that the following change has been recorded concerning:

 the person     the name     the address     the nationality     the residence

Name and Address ELDERING, Charles, A. 214 Commons Way Doylestown, PA 18901 United States of America	State of Nationality	State of Residence
	Telephone No.	
	Facsimile No.	
	Teleprinter No.	

## 3. Further observations, if necessary:

Notification received at the IPEA/US on 01 November 2000 (01.11.00).

## 4. A copy of this notification has been sent to:

<input checked="" type="checkbox"/> the receiving Office	<input type="checkbox"/> the designated Offices concerned
<input type="checkbox"/> the International Searching Authority	<input checked="" type="checkbox"/> the elected Offices concerned
<input type="checkbox"/> the International Preliminary Examining Authority	<input type="checkbox"/> other:

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Facsimile No.: (41-22) 740.14.35	Authorized officer Jaime LEITAO Telephone No.: (41-22) 338.83.38
---	--



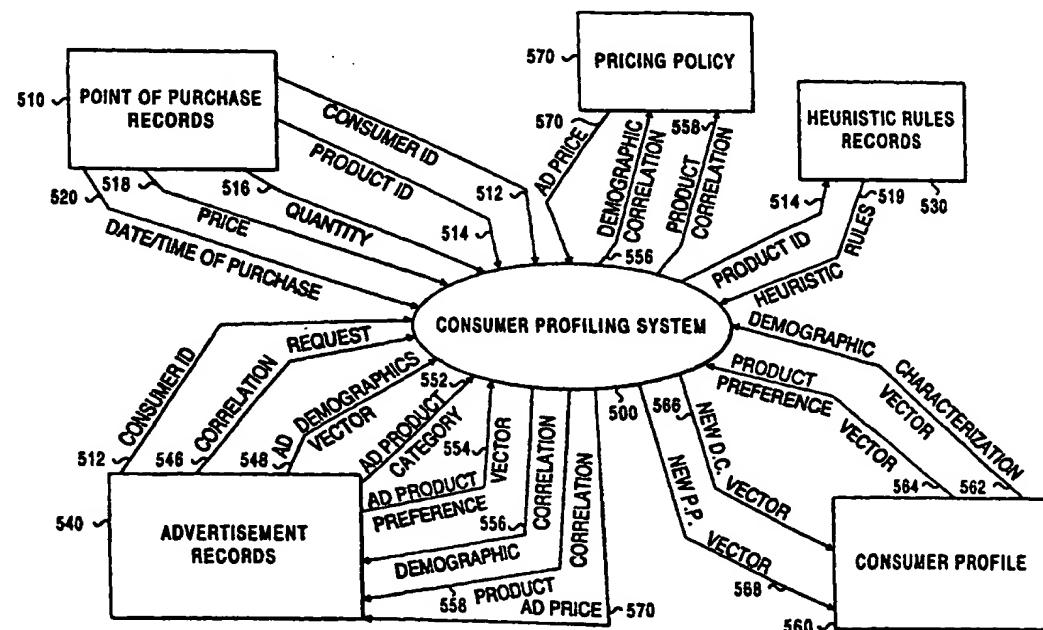
## INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification <sup>6</sup> : G06F 17/60, 17/30, 15/16, 12/00		A1	(11) International Publication Number: <b>WO 00/33228</b>
			(43) International Publication Date: 8 June 2000 (08.06.00)
(21) International Application Number: PCT/US99/28628			
(22) International Filing Date: 2 December 1999 (02.12.99)			
(30) Priority Data:			
09/204,888	3 December 1998 (03.12.98)	US	
09/268,526	12 March 1999 (12.03.99)	US	
09/268,519	12 March 1999 (12.03.99)	US	
(71) Applicant (for all designated States except US): TELECOM PARTNERS LTD. [US/US]; 900 Town Center, New Britain, PA 18901 (US).			(81) Designated States: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).
(72) Inventor; and			
(75) Inventor/Applicant (for US only): ELDERING, Charles, A. [US/US]; 315 Hedgerow Lane, Doylestown, PA 18901 (US).			
(74) Agents: BLASKO, John, P. et al.; J.P. Blasko Professional Corp., 107 North Broad Street, Doylestown, PA 18901 (US).			

## (54) Title: CONSUMER PROFILING AND ADVERTISEMENT SELECTION SYSTEM

## (57) Abstract

A consumer profiling and advertisement selection system (500) is presented in which consumers (100) can be characterized based on their purchase or viewing habits. The result of this process is a consumer characterization vector (562) describing the probabilistic demographics and product preferences of the subscriber or viewer (100). Advertisement characterization vectors (548) describing an actual or hypothetical market for a product or desired viewing audience can be determined. The ad characteristics including an ad demographic vector (548), an ad product category (552) and an ad product preference vector (554) is transmitted along with a consumer ID (512).



The consumer ID (512) is used to retrieve a consumer characterization vector (562) which is correlated with the ad characterization vector (548) to determine the suitability of the advertisement to the consumer (100). A price for displaying the advertisement can be determined based on the results of the correlation of the ad characteristics with the consumer characterisation vector (562). The system can be used to both increase the effectiveness and cost efficiency of advertisements, as well as for determining the price for transmitting or viewing an advertisement, based on the collection of the ad with the consumer profile.

**INTERNATIONAL SEARCH REPORT**

International Application No  
PCT/US 96/15465

**A. CLASSIFICATION OF SUBJECT MATTER**  
IPC 6 H04N7/16 H04N7/173

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)  
IPC 6 H04N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP,A,0 656 728 (SONY CORP) 7 June 1995 see page 3, column 3, line 3 - line 38 see page 4, column 5, line 43 - page 6, column 9, line 31 see figures 1-4,9-11 ---	1-3,5-8, 10,11
P,X	EP,A,0 680 214 (AT & T CORP) 2 November 1995 see page 2, column 1, line 51 - column 2, line 32 see page 4, column 5, line 3 - page 5, column 8, line 19 see figures 3-5 --- -/-	1-3,5-8, 10,11

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

\* Special categories of cited documents :

- 'A' document defining the general state of the art which is not considered to be of particular relevance
- 'E' earlier document but published on or after the international filing date
- 'L' document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- 'O' document referring to an oral disclosure, use, exhibition or other means
- 'P' document published prior to the international filing date but later than the priority date claimed

- 'T' later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- 'X' document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- 'Y' document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
- 'A' document member of the same patent family

2

Date of the actual completion of the international search

Date of mailing of the international search report

10 January 1997

28.01.97

Name and mailing address of the ISA  
European Patent Office, P.B. 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  
Fax (+31-70) 340-3016

Authorized officer

Van der Zaal, R

## INTERNATIONAL SEARCH REPORT

International Application No
PCT/US 96/15465

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>WO,A,95 15654 (ZING SYSTEMS L P) 8 June 1995</p> <p>see page 5, line 10 - page 7, line 8</p> <p>see page 15, line 11 - page 16, line 14</p> <p>see page 17, line 10 - line 22</p> <p>see figures 1,15</p> <p>---</p>	9-11
A	<p>EP,A,0 536 628 (GEN INSTRUMENT CORP) 14 April 1993</p> <p>see page 3, line 37 - page 4, line 3</p> <p>see page 5, line 27 - line 52</p> <p>see figure 2</p> <p>-----</p>	1,3,5-8, 10,11

**INTERNATIONAL SEARCH REPORT**

Information on patent family members

International Application No

PCT/US 96/15465

Patent document cited in search report	Publication date	Patent family member(s)		Publication date
EP-A-0656728	07-06-95	JP-A- CN-A-	7203420 1115948	04-08-95 31-01-96
EP-A-0680214	02-11-95	US-A- CA-A- JP-A-	5532735 2145565 7303087	02-07-96 30-10-95 14-11-95
WO-A-9515654	08-06-95	AU-A- EP-A-	1292895 0740884	19-06-95 06-11-96
EP-A-0536628	14-04-93	US-A-	5231494	27-07-93

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## PATENT COOPERATION TREATY

## PCT

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

REC 27 MAR 2001

WIPO

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 8887.3006PCT	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/US99/28628	International filing date (day/month/year) 02 DECEMBER 1999	Priority date (day/month/year) 12 MARCH 1999
International Patent Classification (IPC) or national classification and IPC Please See Supplemental Sheet.		
Applicant TELECOM PARTNERS LTD		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.

2. This REPORT consists of a total of 4 sheets.

This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority. (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of 19 sheets.

3. This report contains indications relating to the following items:

- I  Basis of the report
- II  Priority
- III  Non-establishment of report with regard to novelty, inventive step or industrial applicability
- IV  Lack of unity of invention
- V  Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI  Certain documents cited
- VII  Certain defects in the international application
- VIII  Certain observations on the international application

Date of submission of the demand 30 JUNE 2000	Date of completion of this report 22 SEPTEMBER 2000
Name and mailing address of the IPEA/US Commissioner of Patents and Trademarks Box PCT Washington, D.C. 20231	Authorized officer Thomas G. Black <i>James R. Matthews</i>
Facsimile No. (703) 305-3230	Telephone No. (703) 305-9707

**I. Basis of the report****1. With regard to the elements of the international application:\*** the international application as originally filed the description:pages \_\_\_\_\_ (See Attached) \_\_\_\_\_, as originally filed  
pages \_\_\_\_\_, filed with the demand  
pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_ the claims:pages \_\_\_\_\_ (See Attached) \_\_\_\_\_, as originally filed  
pages \_\_\_\_\_, as amended (together with any statement) under Article 19  
pages \_\_\_\_\_, filed with the demand  
pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_ the drawings:pages \_\_\_\_\_ (See Attached) \_\_\_\_\_, as originally filed  
pages \_\_\_\_\_, filed with the demand  
pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_ the sequence listing part of thedescription: (See Attached) \_\_\_\_\_, as originally filed  
pages \_\_\_\_\_, filed with the demand  
pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_

2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.  
These elements were available or furnished to this Authority in the following language \_\_\_\_\_ which is:

 the language of a translation furnished for the purposes of international search (under Rule 23.1(b)). the language of publication of the international application (under Rule 48.3(b)). the language of the translation furnished for the purposes of international preliminary examination (under Rules 55.2 and/or 55.3).

3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international

 contained in the international application in printed form. filed together with the international application in computer readable form. furnished subsequently to this Authority in written form. furnished subsequently to this Authority in computer readable form. The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished. The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4.  The amendments have resulted in the cancellation of:

 the description, pages NONE the claims, Nos. NONE the drawings, sheets/fig NONE

5.  This report has been drawn as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).\*\*

\* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17).

\*\*Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/US99/28628

**V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement****1. statement**

Novelty (N)	Claims 1-104	YES
	Claims NONE	NO
Inventive Step (IS)	Claims 1-104	YES
	Claims NONE	NO
Industrial Applicability (IA)	Claims 1-104	YES
	Claims NONE	NO

**2. citations and explanations (Rule 70.7)**

Claims 1-104 meet the criteria set out in PCT Article 33(2)-(4), because the prior art does not teach or fairly suggest a method for profiling a consumer purchases or demographics or preferences including the step calculating or creating characterization vector. This limitation in conjunction with all other limitations of the based claims was not shown by, would not have been obvious over, nor would have been fairly suggested by the prior art of record.

----- NEW CITATIONS -----  
US 5,687,322 A (DEATON et al) 19 JULY 1997, see col. 5, lines 27-43.

**Supplemental Box**

(To be used when the space in any of the preceding boxes is not sufficient)

Continuation of: Boxes I - VIII

Sheet 10

**CLASSIFICATION:**

The International Patent Classification (IPC) and/or the National classification are as listed below:

IPC(7): G06F 17/60, 17/30, 15/16, 12/00 and US Cl.: 707/4, 10, 14, 26; 709/206; 707/4, 10; 705/10, 26, 36

**I. BASIS OF REPORT:**

This report has been drawn on the basis of the description,  
page(s) 1-44, as originally filed.

page(s) NONE, filed with the demand.

and additional amendments:

NONE

This report has been drawn on the basis of the claims,  
page(s) NONE, as originally filed.

page(s) NONE, as amended under Article 19.

page(s) 45-63, filed with the demand.

and additional amendments:

NONE

This report has been drawn on the basis of the drawings,  
page(s) 1-17, as originally filed.

page(s) NONE, filed with the demand.

and additional amendments:

NONE

This report has been drawn on the basis of the sequence listing part of the description:

page(s) NONE, as originally filed.

page(s) NONE, filed with the demand.

and additional amendments:

NONE

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/US99/28628

## A. CLASSIFICATION OF SUBJECT MATTER

IPC(6) : G06F 17/60, 17/30, 15/16, 12/00

US CL : 707/4, 10, 14, 26; 709/206; 707/4, 10

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 707/4, 10, 14, 26; 709/206; 707/4, 10

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

NONE

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

WEST, EAST, IEEE(ONLINE)

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 5,724,521 A (DEDRICK) 03 March 1998, col. 19, lines 36-41.	19
Y	US 5,761,662 A (DASAN) 02 June 1998, col. 2, lines 1-54.	1-3, 5-37
Y,P	US 5,978,799 A (HIRSCH) 02 November 1999, col. 1, line 45-col. 3, line 40.	1-18, 20-37
Y	US 5,604,542 A (DEDRICK) 18 February 1997, col. 2, line 34-53.	1-37
T	US 6,009,410 A (LEMOLE et al.) 28 December 1999, col. 1, line 56-col. 2, line 55.	1-37
T	US 6,038,591 A (WOLFE et al) 14 March 2000, col. 1, lines 60-64.	1

<input checked="" type="checkbox"/>	Further documents are listed in the continuation of Box C.	<input type="checkbox"/>	See patent family annex.
*A*	Special categories of cited documents:	*T*	later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
*E*	document defining the general state of the art which is not considered to be of particular relevance	*X*	document of particular relevance, the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
*L*	earlier document published on or after the international filing date	*Y*	document of particular relevance, the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
*R*	document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	*&*	document member of the same patent family
*P*	document referring to an oral disclosure, use, exhibition or other means		
	document published prior to the international filing date but later than the priority date claimed		

Date of the actual completion of the international search	Date of mailing of the international search report
23 MARCH 2000	25 APR 2000
Name and mailing address of the ISA/US Commissioner of Patents and Trademarks Box PCT Washington, D.C. 20231	Authorized officer Thomas G. Black Telephone No. (703) 305-9707
Faxsimile No. (703) 305-3230	<i>James R. Matthews</i>

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/US99/28628

## C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y,P	US 5,991,735 A (GERACE) 23 November 1999, col. 2, lines 10-65.	1, 4,8, 11 14, 16, 34
Y	US 5,848,396 (GERACE) 08 December 1998, col. 4, lines 1-67.	1, 4, 8, 11, 16, 34
Y,P	US 5,933,811 A (ANGLES et al.) 03 August 1999, see abstract.	1
Y	GALLAGHER et al. A Framework for Targeting Banner Advertising on the Internet, System Sciences, January 1997, Proceedings of the Thirtieth Hawaii International Conference. Vol. 4. pages 265-274.	1, 4, 8, 11, 16, 34
Y	MCCANDLESS. Web Advertising, IEEE Intelligent Systems. June 1998. Vol. 13. pages 8-9.	1, 4, 8
Y	CHANG et al. In Exchange for Consumer Information on the Internet: The Economics and Issues. System Sciences, January 1998., Proceedings of the thirty First Hawaii International Conference. Vol. 4. pages 533-542.	1, 4, 8, 16, 34